

Serial No. 10/687,864  
Attorney Docket: ARE 0003 PA - 35022/3

### REMARKS

Claims 1-28 are pending in the present application. By the present amendment, claims 1, 2, 4, 6-9, 11-17 and 19-23 have been amended; claims 3, 5, 10 and 18 have been cancelled; and claims 24-28 have been withdrawn.

#### I. Elections/Restrictions.

The Applicant hereby affirms the election of the Invention of Group 1, as identified by the Examiner as claims 1-23.

#### II. Claim Rejections - 35 U.S.C. §112.

The examiner has rejected claims 1-23 under 35 U.S.C. §112, second paragraph, based upon the use of the terms "carbonate-type", "water-based" and the trademark "Triton-X". The applicant has amended the claims to specifically recite water as an element of the composition, to recite buffers as being selected from the group consisting of alkali metal and/or alkaline metal salt forms of bicarbonate and/or carbonate; and to recite octyl phenol ethoxylate, the generic name for the formulation sold under the mark Triton-X.

In view of these amendments, the applicant believes that each and every issue raised by the examiner under this rejection has been addressed and overcome.

#### III. Claim Rejections - 35 U.S.C. §102.

The examiner has rejected claims 1-3, 5-9, 10 and 12-14, as being anticipated by Heffner, et al. (U.S. 5,437,686); claims 1-10 and 12-19 as being anticipated by King (4,485,028); and claims 1-4 and 15-17 as being anticipated by Lee, et al. (U.S. 5,366,593).

The applicant has amended each of the pending independent claims to recite as an element the requirement that the combination of at least one of the monopersulfate compounds and at least one of the ketones generates a dioxirane species. King includes the combination of aluminum persulfate with ketones; however, a persulfate is not a monopersulfate; rather, persulfate is a peroxydisulfate, shown by the chemical formula  $S_2O_8^{2-}$ . Monopersulfate, known by the synonym peroxy~~mono~~sulfate, shown by the chemical formula  $HSO_5^-$ . A monopersulfate compound, refers to the combination of sulfate salts with a monopersulfate (an example of a monopersulfate compound is a triple salt,  $2KHSO_5 \cdot KHSO_4 \cdot K_2SO_4$ , manufactured and sold by Dupont under the trademark Oxone®; persulfate is not one of the salts that comprise this compound). Furthermore, there is no indication or expectation that the combination of a persulfate and a ketone will result in a dioxirane. Therefore, the invention as claimed, originally and in the amended claims submitted herewith, is not anticipated by King.

The applicant has amended the independent claims to reference the specific concentration ranges of monopersulfate, a buffer and the ketones, specifically as follows:

wherein the monopersulfate compound(s) are present in a concentration range of about 0.1-40% weight w/v, the buffer(s) are present in a concentration range of about 0.05-20% w/v, and the

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ketone(s) are present in the concentration range of about 0.1-40%  
v/v;

The invention as described in Lee, et al. does not include the elements within these ranges; and therefore, the claims as amended as not anticipated by Lee, et al.

The applicant has amended the independent claims to specifically recite that at least one of the ketones in the composition of the present invention is selected from the group consisting of: acetone, 2-butanone, 2-pentanone, 2-hydroxy-4-methyl-2-pentanone, hexafluoroacetone, trifluoroacetone, acetophenone, camphorsulfonic acid, and levulinic acid. The formulation as described in Heffner does not include any of these ketones, and therefore the same does not anticipate the claims of the invention as set forth in this response.

In view of the claim amendments and comments, the applicant believes that each and every issue raised by the examiner under this rejection has been addressed and overcome.

#### **IV. Claim Rejections - 35 U.S.C. §103.**

The examiner rejects the claims 11 and 20-23 under 35 U.S.C. §103 (a) being unpatentable over King as applied to claims 1-10 and 12-19, and further in view of Kramer, et al. (U.S. 4,850,729) and Clodeny, et al. (U.S. 4,576,738). However, in light of the fact that a persulfate does not constitute a monopersulfate, and that the combination of a ketone with a persulfate does not generate a dioxirane species (as required by the amended claims), King is no longer an applicable reference, and therefore does not support the office's 35 U.S.C. §103 (a) rejection.

In view of the claim amendments and comments, the applicant believes that each and every issue raised by the examiner under this rejection has been addressed and overcome.

#### **V. Double Patenting.**

The examiner has provisionally rejected claims 1-23 under the doctrine of obviousness-type double patenting as being unpatentable over claims 8-27 and 34-40 of co-pending application Serial No. 10/693,194. The applicant at this time has not provided a terminal disclaimer in this application, but will consider such a disclaimer in the event the claims in this application and the co-pending application are allowed, and in the form allowed would constitute obviousness-type double patenting.

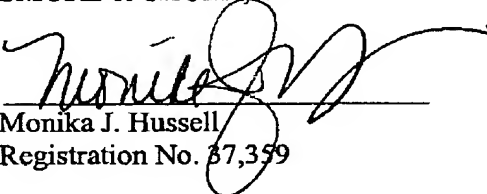
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**VI. Conclusion.**

Applicant respectfully submits that the present application is in condition for allowance. The examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matters respectfully solicited.

Respectfully submitted,

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